



Subject: Farmhouse - Pool drainage

Andrea,

Please see the following details related to the swimming pool filter backwash and pool drain down requirements:

Swimming pool filter backwash requirements:

With the filtration system used at Farmhouse it is necessary to clean the filter using the pool water. This is done by reversing the flow of water through the filter at a rate of approx. 167 lpm for a period of approximately 3 to 4 minutes, the water used will have a content of chlorine which is typically 1 to 1.5ppm and can be lower if UV is used.

A holding tank will be required if the site is using a septic tank or a soakaway that could potentially contaminate a local water course, backwash water is only permitted in the soakaway if there is no risk of contamination.

If it is deemed necessary to have a holding tank this should be capable of holding the amount of water used in a backwash plus a safety factor, in this case the tank would need to be min. 1,000L.

The backwash procedure will be carried out once a week (depending upon pool usage).

When the backwash has been carried out the water should stand in the tank for one week or until the chlorine has been dispersed from the water. Only then should the water be emptied into the soakaway (a chlorine test will be carried out to ensure the chlorine has dispersed prior to emptying into the soak away).

In the event that a large capacity of water needs to be removed within a short space of time the pool water can be neutralised prior to emptying then pumped to a location that will accept the quantity of water, this procedure is a last resort and should not be necessary with good water management.

Swimming pool full drain down:

If there is a requirement to drain the swimming pool completely down, the best solution would be to add the Sodium Thiosulphate into the pool directly. As with many other chemical treatments, the pool should be closed to swimmers when sodium thiosulfate is being added to the water. Similar to the above the pool water would need to be tested before discharging to the soak away. The pool could be drained via a sump pump. A tiled pool must be filled or emptied at a constant rate no greater than 750mm in 24 hours and the water heated at a constant rate no greater than 0.25°C per hour to avoid thermal shock. Great care should be taken re-filling and re-heating the water.



The following requirements apply to the drainage process when fully emptying the swimming pool:

- Swimming pool volume: approx. 29.1 m³ (29100 litres)
- Rate of discharge / discharge flow: 11.46 l/min (Emptying 750mm at 24hours)
- Volume of discharge in 24 hours: 16500 litres
- Total amount of pool water requires to empty: 29100 litres
- Total time required to empty the swimming pool: 2540 minutes (42.33 hours)

We would advise that you contact the local water authority to find out what you are allowed to do, as different water authorities have different rules and regulations and there may be specific regulations that you will have to follow for backwashing and for a full drain down. They will also be able to advise on water the level of chlorine needs to be depleted to before discharging into the sewer.